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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,785	01/10/2002	Jorge A. Morando	MJV-130-A	3153

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EXAMINER

KASTLER, SCOTT R

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,785

Applicant(s)

MORANDO, JORGE A.

Examiner

Scott Kastler

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of European'569, or Kleymeyer et al (the U.S. equivalent of European'569) in view of Morando'507 and Morando'517. Each of European'569, and Kleymeyer et al teach a galvanizing roll assembly for submergence in molten aluminum or zinc (see col. 3 lines 28-38 of Kleymeyer et al for example) including an arm (36), a strip engaging roll (30) having a trunnion (54) with a bearing assembly supporting the trunnion on the arm, thereby showing all aspects of the above claims except the use of a self aligning bearing assembly including a roller bearing, or the specific recitation that each of the arm, roll, trunnion, and bearing comprise (where the term "comprise" allows for the inclusion of other, unnamed components even in major amounts) material that present low (where "low" is a relative term, not properly further limiting) solubility with a particular molten metal (which could be any metal, such as molten iron or mercury) in which they are to be submerged, where the alloy materials have a hardness of at least 25 Rc at the molten metal operating temperature.

Morando'507 teaches that in galvanizing roll assemblies, in order to reduce dross accumulation on the parts of the assembly to be submerged in the molten metal, where dross accumulation adversely affects the galvanizing operation (see col. 1 line 13 to col. 2 line 37 for example), a composition having a high hardness of at least 40Rc (see col. 9 lines 62-67 for

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example), low solubility in molten aluminum and/or zinc and which overlaps the compositions recited in instant claims 2, 8, and 16 (see claim 1 of Morando'507 for example) was known in the art at the time the invention was made. Because it has been held to be a *prima facie* obvious modification, where a prior art composition overlaps a claimed composition and produces substantially similar properties as the claimed composition, to select values from a prior art composition range which also fits a claimed composition range (see MPEP 2144.05 and *In re Wertheim*, 191 USPQ 90), one of ordinary skill in the art at the time the invention was made would have found it to be an obvious modification to select a composition within the composition range taught by Morando'507 which also falls within the composition ranges recited in instant claims 2, 8 and 16.

Morando'517 teaches that in roll assemblies intended for immersion in zinc or aluminum baths (see col. 2 lines 11-13 for example), a bearing assembly for supporting a roll (10) with a trunnion (14) including a self aligning roller bearing, as described in the embodiments of figures 3 and 6 for example, was known in the art at the time the invention was made, and that these improved bearings afford reduced stalling of the roll due to bearing failure and eliminates the need for lubrication of the bearing (see col. 1 line 53 to col. 2 line 16 for example).

Because the galvanizing roll assemblies of each of European'569, or Kleymeyer et al, would also benefit from reduced dross accumulation, reduced roll stalling and the elimination of the need to lubricate the bearings, motivation to replace the bearings of European'569, or Kleymeyer et al with the improved bearings of Morando'517, which are stated to reduce roll stalling and eliminate the need for lubrication, where each of the arm, roll, trunnions and bearings at least comprise the alloy materials taught by Morando'507, which is taught to reduce


gross accumulation, would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (703) 308-2506. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-3050. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


Scott Kastler
Primary Examiner
Art Unit 1742

sk
June 13, 2003